

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A speech processing system receiving an input related to one of speech and text and process the input to provide an output related to one of speech and text, the speech processing system accessing a module derived from a phone set having a plurality of phones for a tonal language₇; wherein the tonal language comprises a plurality of different tones with different levels of pitch, the phones being used to model syllables used in the module, the syllables having an initial part and a final part₇; wherein at least some of the syllables of the tonal language include a glide, the glide being embodied in the initial part₇; and wherein the final part comprises a first portion corresponding to a first relative pitch and a second portion corresponding to a second relative pitch, wherein the first portion and the second portion jointly and implicitly carry tonal information; and wherein the different levels of pitch comprise at least two categorical levels, and wherein each portion has a categorical level associated with it.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Previously Presented) The speech processing system of claim 1 wherein the different levels of pitch comprise three categorical levels, and wherein each portion has a categorical level associated with it.

6. (Previously Presented) The speech processing system of claim 1 wherein the different levels of pitch comprise five categorical levels, and wherein each portion has a categorical level associated with it.

7. (Cancelled)

8. (Cancelled)

9. (Original) The speech processing system of claim 1 wherein the speech processing system comprises one of a speech recognition system and a text-to-speech converter.

10. (Cancelled)

11. (Cancelled)

12. (Previously Presented) The speech processing system of claim 9 wherein the different levels of pitch comprise two categorical levels, and wherein each portion has a categorical level associated with it.

13. (Previously Presented) The speech processing system of claim 9 wherein the different levels of pitch comprise three categorical levels, and wherein each portion has a categorical level associated with it.

14. (Previously Presented) The speech processing system of claim 9 wherein the different levels of pitch comprise five categorical levels, and wherein each portion has a categorical level associated with it.

15. (Cancelled)

16. (Cancelled)

17. (Previously Presented) The speech processing system of claim 1 wherein the tonal language comprises Chinese or a dialect thereof, such as Cantonese.

18. (Previously Presented) The speech processing system of claim 1 wherein the tonal language comprises Thai or a tonal dialect thereof.

19. (Previously Presented) The speech processing system of claim 1 wherein the tonal language comprises Vietnamese or a tonal dialect thereof.

20. (Currently Amended) A speech processing system receiving an input related to one of speech and text and process the input to perform one of speech recognition and text-to-speech conversion in order to provide an output related to one of speech and text, the speech processing system accessing a module derived from a phone set having a plurality of phones for a tonal language comprising a plurality of different tones with different levels of pitch_T; the phones being used to model syllables used in the module, at least some of the syllables having an initial part and final part_T; wherein a first set of the plurality of phones are used to describe the glide dependent initial part, and a second set of the plurality of phones are used to describe the final part_T; wherein the final part comprises a first phone corresponding to a first

relative pitch and a second phone corresponding to a second relative pitch; and wherein the different levels of pitch comprise at least two categorical levels, and wherein each phone has a categorical level associated with it.

21. (Cancelled)

22. (Original) The speech processing system of claim 20 wherein the different levels of pitch comprise three categorical levels, and wherein each phone has a categorical level associated with it.

23. (Original) The speech processing system of claim 20 wherein the different levels of pitch comprise five categorical levels, and wherein each phone has a categorical level associated with it.

24. (Previously Presented) The speech processing system of claim 20 wherein at least one syllable comprises only the final part having two phones carrying partial tonal information each.

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Currently Amended) A computer readable storage media having instructions, which when implemented on a computing device perform speech processing comprising:

accessing a module having a phone set comprising a plurality of phones for a tonal language_T; wherein the tonal language comprises a plurality of different tones with different levels of pitch_T; the phones being used to model syllables, the syllables having an initial part and final part_T; wherein at least some of the syllables of the tonal language include a glide, the glide being embodied in the initial part_T; and wherein the final part comprises a first phone corresponding to a first relative pitch and a second phone corresponding to a second relative pitch_T; wherein the first and second phones jointly and implicitly carry tonal information; and wherein the different levels of pitch comprise at least two categorical levels, and wherein each phone has a categorical level associated with it;

utilizing the phone set to identify syllables corresponding to the input for performing one of speech recognition and text-to-speech conversion; and

providing an output corresponding to one of speech recognition and text-to-speech conversion.

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)